

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,254	05/02/2001	Mark A. Kampe	80168-0102 P5088	5905
32658	7590	09/09/2004	EXAMINER	
HOGAN & HARTSON LLP ONE TABOR CENTER, SUITE 1500 1200 SEVENTEEN ST. DENVER, CO 80202			HO, THE T	
			ART UNIT	PAPER NUMBER
			2126	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/846,254

Applicant(s)

KAMPE ET AL.

Examiner

The Thanh Ho

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-93 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/6/01, 11/12/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is in response to the application filed 5/2/2001.
2. Claims 1-93 have been examined and are pending in the application.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-13, 18-19, 21-30, 33-50, 62-69, 80-85, 87-90 and 93 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen U.S Patent No. 6,477,585.

**As to claim 1**, Cohen teaches a network (network 3, Fig. 1) having a plurality of nodes (nodes A, B, and C, Fig. 1), comprising:

an event channel (communications through the event channel, lines 48-49 column 5) adapted an event (an event, line 26 column 5) between a publisher node (event supplier, line 20 column 5) and a subscriber node (event consumer, lines 20-21 column 5) within said network;

a filter (consumer-side EMS filter, line 6 column 7) to identify said event on said subscriber node (...before the event consumer can receive event data, it must also

define a "filter" which EMS then uses to determine whether particular events from the one or more event suppliers gets passed to that event consumer..., lines 19-22 column 6);

an application on said subscriber node (DCE application, lines 34-35 column 5) to receive said event according to said filter (to receive and process events from one or more event suppliers, lines 34-37 column 5).

**As to claim 2**, Cohen further teaches an event server (EMS 22, Fig. 3) on said subscriber node adapted said event to said filter from said event channel (...EMS uses the filter to determine whether particular events from the one or more event suppliers gets passed to that event consumer..., lines 19-22 column 6).

**As to claim 3**, Cohen further teaches event server exchanges information with another event server (EMS 22 exchanges events with layer 32 of event supplier 24n, Fig. 3).

**As to claim 4**, Cohen further teaches the application opens said event channel through said event server (EMS sets up an event channel to decouple the communications between the supplier and consumer, lines 41-43 column 9).

**As to claim 5**, Cohen further teaches the event includes at least one pattern field matches a filter field within said filter (...an event "filter expression" is preferably a 3-tuple consisting of the attribute name, the attribute value, and an attribute operator which defines a compare operation. The attribute operator in a filter expression is used to effect the comparison between the named attribute in the event and the attribute value..., lines 53-60 column 6).

**As to claim 6**, Cohen further teaches the event further includes a data field (each event is associated with a fixed header part and a variable length data part, lines 3-4 column 10).

**As to claim 7**, Cohen further teaches the event channel has a unique name (EMS event channel, line 28 column 11).

**As to claim 8**, Cohen further teaches the unique name is registered in a naming service within said network (...the naming service is used by application servers to store their location and interfaces, known as server bindings..., lines 64-66 column 4).

**As to claim 9**, Cohen further teaches publisher node has a configuration being known to said event server on said subscriber node (a supplier registers with the event management service by receiving a handle, lines 6-7 column 6; ...event origin specifies where the event originated. The origin specifies the netname of the host where the supplier is running, the name of the supplier, descname, and supplier process identification pid, uid, gid..., lines 8-12 column 20; lines 30-51 column 1).

**As to claim 10**, Cohen further teaches an event server (layer 32 of event supplier 24n, Fig. 3) on said publisher node publishes said event on said event channel (layer 32 sending events to EMS 22, Fig. 3).

**As to claim 11**, Cohen further teaches said subscriber node has a configuration being known to said event server on said publisher node (lines 30-51 column 1).

**As to claim 12**, it is a system claim of claims 1-2. Therefore, it is rejected for the same reasons as claims 1-2 above.

**As to claim 13**, Cohen further teaches said event server includes an event control block (event log file, line 13 column 6) to subscribe to said event channel.

**As to claim 18**, Cohen further teaches event server further includes an event protocol module to manage network connections to said event control block (lines 35-48 column 4).

**As to claim 19**, Cohen further teaches said event control block includes a remote event control block (queuing mechanism, line 9 column 7) that correlates to a event control block.

**As to claim 21**, Cohen further teaches an event application program interface to publish and subscribe to said event channel (an EMS Application Programming Interface API 32 may be used by event supplier to reach the Event Management Service 22, lines 43-46 column 5; consumer API, line 44 column 7).

**As to claim 22**, it is a system claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

**As to claim 23**, Cohen further teaches said event is placed in a queue by said event server (...after filtering, a queuing mechanism 47 is used to control the flow of events to the interested consumers..., lines 8-11 column 7).

**As to claims 24-25**, they are system claims of claim 5. Therefore, they are rejected for the same reasons as claim 5 above.

**As to claim 26**, Cohen further teaches said filter is assigned by said application (the event consumer defines a "filter" which EMS then uses to determine whether

Art Unit: 2126

particular events from the one or more event suppliers gets passed to that event consumer, lines 19-22 column 6).

**As to claim 27**, it is a system claim of claims 1 and 5-6. Therefore, it is rejected for the same reasons as claims 1 and 5-6 above.

**As to claims 28-30**, they are system claims of claims 5 and 1-2, respectively. Therefore, they are rejected for the same reasons as claims 5 and 1-2 above.

**As to claim 33**, it is a method claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

**As to claim 34**, it is a method claim of claims 7-8. Therefore, it is rejected for the same reasons as claims 7-8 above.

**As to claim 35**, it is a method claim of claim 10. Therefore, it is rejected for the same reasons as claim 10 above.

**As to claim 36**, Cohen further teaches dispatching a callback responding to said event (lines 30-39 column 16).

**As to claim 37**, Cohen further teaches creating said event channel (EMS sets up an event channel to decouple the communications between the supplier and consumer, lines 41-43 column 9).

**As to claims 38-40**, they are method claims of claims 1, 5 and 13, respectively. Therefore, they are rejected for the same reasons as claims 1, 5 and 13 above.

**As to claims 41-42**, they are method claims of claims 1 and 13, respectively. Therefore, they are rejected for the same reasons as claims 1 and 13 above.



**As to claim 43**, Cohen further teaches invoking an event control block (lines 12-29 column 6).

**As to claim 44**, it is a method claim of claims 1, 13 and 36. Therefore, it is rejected for the same reasons as claims 1, 13 and 36 above. Cohen further teaches receiving a request from an application on a node for said event channel (event consumer register with an event management service to receive selected events generated from the one or more event suppliers, lines 36-39 column 2).

**As to claim 45**, it is a method claim of claim 4. Therefore, it is rejected for the same reasons as claim 4 above.

**As to claim 46**, Cohen further teaches granting an authorization to said event channel (consumer authentication and authorization, line 59 column 12; consumer's access rights, line 12 column 14).

**As to claim 47**, it is a method claim of claims 7-8. Therefore, it is rejected for the same reasons as claims 7-8 above.

**As to claim 48**, it is a method claim of claim 10. Therefore, it is rejected for the same reasons as claim 10 above.

**As to claim 49**, it is a method claim of claims 10 and 44. Therefore, it is rejected for the same reasons as claims 10 and 44 above.

**As to claim 50**, it is a method claim of claim 13. Therefore, it is rejected for the same reasons as claim 13 above.

**As to claim 62**, it is a method claim of claims 1, 15 and 46. Therefore, it is rejected for the same reasons as claims 1, 15 and 46 above. Cohen further teaches

sending a filter control message (RPC 31, Fig. 3) to another event server (layer 32, Fig. 3) at another node (event supplier 24n, Fig. 3).

**As to claims 63-64**, they are method claims of claim 13. Therefore, they are rejected for the same reasons as claim 13 above.

**As to claims 65-66**, they are method claims of claims 7-8. Therefore, they are rejected for the same reasons as claims 7-8 above.

**As to claim 67**, Cohen further teaches unlocking said event control block (line 66 column 6 to line 13 column 7).

**As to claim 68**, Cohen further teaches changing an access permission to said event channel (...a supplier's access rights may be verified on the first event send to EMS, and the consumer's access rights may be verified before forwarding events to that consumer. Authenticated RPC is used to access the EMS supplier and consumer Remote API..., lines 11-15 column 14).

**As to claim 69**, it is a method claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

**As to claims 80-82**, they are method claims of claims 1, 26 and 4, respectively. Therefore, they are rejected for the same reasons as claims 1, 26 and 4 above.

**As to claims 83-84**, Cohen further teaches opening said event channel in a write mode or read mode (lines 41-62 column 9).

**As to claim 85**, it is a method claim of claim 23. Therefore, it is rejected for the same reasons as claim 23 above.

**As to claims 87-90**, they are computer program product claims of claims 1, 44, 49 and 62, respectively. Therefore, they are rejected for the same reasons as claims 1, 44, 49 and 62 above.

**As to claim 93**, it is a computer program product claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-17, 20, 51-61, 74-75, 78-79, 86 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen.

**As to claim 14**, Cohen does not explicitly teach a separate event control manager within the event server in the event consumer side. However, Cohen teaches that the event server also plays the role of controlling the event control block (...once the event arrives at EMS via a remote procedure call, it is stored in the Event Log 42. EMS 22 then performs a parsing operation to determine whether the event gets passed on to any event consumers..., lines 1-4 column 7; EMS writes the event to the EMS Event Log in order to save the event in case the event cannot be immediately delivered, lines 50-51 column 9). Therefore one of ordinary skill in the art would conclude that the

Art Unit: 2126

event server is also the event control manager since it controls the event control block as disclosed by Cohen (lines 1-4 column 7; lines 50-51 column 9).

**As to claim 15**, Cohen as modified further teaches said event control manager updates said event control block (...after the event is forwarded to all interested consumers, it is deleted from the Event Log 42..., lines 11-13 column 7).

**As to claim 16**, Cohen as modified further teaches event control manager detects an overload condition within said event control block (line 64 column 6 to line 13 column 7).

**As to claim 17**, Cohen as modified further teaches said event control manager controls a configuration of said event control block (EMS writes the event to the EMS Event Log in order to save the event in case the event cannot be immediately delivered, lines 50-51 column 9).

**As to claim 20**, Cohen does not explicitly teach a separate event channel descriptor within the event server in the event consumer side. However, Cohen teaches that the event server also plays the role of accessing the event control block (...event arrives at EMS is stored in the Event Log 42. EMS 22 then performs a parsing operation to determine whether the event gets passed on to any event consumers..., lines 1-4 column 7). Therefore one of ordinary skill in the art would conclude that the event server is also the event channel descriptor since it accesses the event control block as disclosed by Cohen (lines 1-4 column 7).

**As to claim 51**, it is a system claim of claims 1-2, 13, 15 and 20. Therefore, it is rejected for the same reasons as claims 1-2, 13, 15 and 20 above.

**As to claim 52**, it is a system claim of claim 20. Therefore, it is rejected for the same reasons as claim 20 above.

**As to claim 53**, Cohen as modified further teaches said event channel descriptor is de-allocated when said event channel is terminated (lines 17-40 column 8).

**As to claim 54**, it is a system claim of claim 20. Therefore, it is rejected for the same reasons as claim 20 above.

**As to claims 55-59**, they are system claims of claims 13, 20, 19, 15 and 16, respectively. Therefore, they are rejected for the same reasons as claims 13, 20, 19, 15 and 16 above.

**As to claims 60-61**, they are system claims of claim 18. Therefore, they are rejected for the same reasons as claim 18 above.

**As to claim 74**, it is a method claim of claims 1, 13-14 and 62. Therefore, it is rejected for the same reasons as claims 1, 13-14 and 62 above.

**As to claim 75**, Cohen as modified further teaches building said filter control message (lines 1-3 column 2).

**As to claim 78**, it is a method claim of claim 68. Therefore, it is rejected for the same reasons as claim 68 above.

**As to claim 79**, Cohen as modified further teaches unmarking said remote event control block object (...after the event is forwarded to all interested consumers, it is deleted from the Event Log 42..., lines 11-13 column 7).

**As to claim 86**, it is a method claim of claim 16. Therefore, it is rejected for the same reasons as claim 16 above.

---

**As to claim 92**, it is a computer program product claim of claim 74. Therefore, it is rejected for the same reasons as claim 74 above.

5. Claims 31-32, 70-73, 76-77 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen in view of Novik U.S Patent No. 6,314,533.

**As to claim 31**, Cohen does not explicitly teach pattern field is taken from a binary tree. Novik teaches a system of filtering events (Fig. 6) wherein the event definitions being filtered through the filtering tree being forwarding to event subscriber (Fig. 6; lines 40-53 column 14). It would have been obvious to apply the teachings of Novik to the system of Cohen because using the filtering tree would discarded any event that is not requested by the event subscriber as disclosed by Novik (lines 56-59 column 2).

**As to claim 32**, Novik further teaches aid binary tree is a lexicographic binary tree (lines 40-53 column 14).

**As to claim 70**, it is a method claim of claims 1 and 31. Therefore, it is rejected for the same reasons as claims 1 and 31 above.

**As to claim 71**, Novik further teaches building said search trees (assembles one or more filtering trees, lines 40-41 column 14).

**As to claim 72**, Novik further teaches placing heads from said plurality of search trees within said filter (filtering trees 74 within filtering module 76, Fig. 6).

**As to claim 73**, Novik further teaches modifying said search trees (modifying event-filtering definition, line 2 column 22).

**As to claims 76-77**, they are method claims of claims 31 and 73, respectively. Therefore, they are rejected for the same reasons as claims 31 and 73 above.

**As to claim 91**, it is a computer program product claim of claim 70. Therefore, it is rejected for the same reasons as claim 70 above.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to The Thanh Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Any response to this action should be mailed to:

Commissioner for Patents  
P.O Box 1450  
Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 872 - 9306.
- OFFICAL faxes must be signed and sent to (703) 872 - 9306.
- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

  
MENG-DE T. AN  
SENIOR PATENT EXAMINER  
TECHNOLOGY CENTER 2100